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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 S. WACKER DRIVE
32ND FLOOR
CHICAGO, IL 60606

EXAMINER

AN, SHAWN S

ART UNIT PAPER NUMBER

2613

DATE MAILED: 03/22/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/914,400

Applicant(s)

BAUR ET AL.

Examiner

Shawn S An

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 9-10, and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Nonami et al (4,935,810).

Regarding claim 1, Nonami et al discloses a device for observing field, comprising:

at least two video cameras (Fig. 2, elements 23, 24) associated with optics for acquiring images of a common area of the field to be observed and delivering electric signal representative of the acquired images;

an electronic device (Fig. 1) for processing the signals delivered by the cameras;

means for placing in memory (5L, 5R) representation of objects that appear in the field;

tracking means (17) for automatically identifying at least two points P1, P2 that are common to the acquired images, wherein at least one point is associated with one of the representations, and wherein the tracking means produces information relative to the position of these points in 3-D space;

calculation means (18) for determining a value representing the distance separating the points;

processing means (15L, 15R) to transform the representative values into signals; and

communication means (16L, 16R) to provide the operator with the information relative to the distance from signals coming from the processing means.

Regarding claim 2, Nonami et al discloses a stereoscopic endoscope (Fig. 2).

Regarding claim 3, Nonami et al discloses the optics, comprising: parallel axis that are separated from each other by a distance D ; equal focal lengths of distance f ; coplanar focal planes; and data produced by the tracking means comprises, for each of the two points, x_L , x_R , and y of the image in the focal plan of the corresponding optics, wherein y is the y -coordinate of the image of the point in the left and right spaces (Figs 5 and 10).

Regarding claim 4, Nonami et al discloses determining the distance separating the two points in 3-D space using the formula (col. 6, lines 30-33).

Regarding claim 5, Nonami et al discloses a video screen (16L, 16R) displaying an image of the observed field.

Regarding claims 6-7, Nonami et al discloses processing means generates an image of the representative value and superimpose the significant image (index) on the image of the observed field on the video screen (Fig. 15).

Regarding claim 9, Nonami et al discloses means for synchronizing (12) the images of the two cameras.

Regarding claim 10, Nonami et al discloses A/D converter (2R, 2L) interposed between each camera and the respective electronic device for processing the signals.

Regarding claim 11, Nonami et al discloses memory (5R, 5L) for the storage of signals coming from the A/D/ converter.

Regarding claim 13, Nonami et al discloses correction means (Fig. 30) to process the images in order to reduce the effect of any aberrations of the cameras.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nonami et al (4,935,810).

Regarding claim 8, even though Nonami et al fails to disclose a zone showing a color gradient, the Examiner takes official notice that a zone showing a color gradient is conventionally well known in the art.

Therefore, it would have been obvious to a person of skill in the art to employ the conventional concept of viewing a zone showing a color gradient so as to review or observe the images.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nonami et al (4,935,810) in view of Eino et al (4,989,083).

Regarding claim 12, Nonami et al fails to disclose means for selecting only a part of the information coming from the A/D converters.

However, Eino et al teaches means for selecting (filter) only a part of the information by filtering (col. 4, lines 26-32).

Therefore, it would have been obvious to a person of skill in the art employing a stereoscopic endoscope as taught by Nonami et al to incorporate the selecting means as taught by the Eino et al so as to selectively reduce the volume of signals.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nonami et al (4,935,810) in view of Matsunaka et al (5,305,098).

Regarding claim 14, Nonami et al fails to disclose a switch that can limit the information displayed on the screen to the image coming from one of the cameras.

However, Matsunaka et al teaches a stereoscopic endoscope comprising a switch (Fig. 14, element 66) that can limit the information displayed on the screen (68) to the image coming from one of the cameras (60L, 60R).

Therefore, it would have been obvious to a person of skill in the art employing a stereoscopic endoscope as taught by Nonami et al to incorporate the switch as taught by the Matsunaka et al so as to review or observe an either one of the images independently.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Iwasaki (4,851,901), Stereoscopic TV apparatus.

B) Takahashi (5,557,454), Stereoscopic endoscope.

8. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Art Unit: 2613

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to **Shawn S An** whose telephone number is 703-305-0099. The Examiner can normally be reached on Flex hours (10).

10. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SSA

Primary Patent Examiner

3/18/04